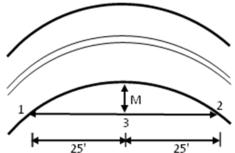1. Safety and Equipment – Before beginning any field investigation, check that all equipment is available and operable. Although this procedure was developed to minimize exposure to vehicles, some interaction is necessary, so follow NCDOT guidelines for personal safety while implementing this field procedure. Necessary equipment includes:
   a. Safety Vest (Class II or above as required)
   b. Digital Level (4' long)
   c. Hammer
   d. Masonry Nails (e.g., Parker-Kalon 1½" by ¼")
   e. Measuring Tape (50' or 100' Metal or Cloth, with metal preferred)
   f. Metal Tape Measure (25')
   g. Clipboard, Field Investigation Form, and Pen
   h. Measuring Wheel

2. General Curve Investigation – Determine the limits (Point of Curvature, PC, and Point of Tangency, PT) of the curve through visual observations of the tangent sections leading into and out of the curve. All measurements should occur within these limits of the curve. Try to locate representative areas of the curve to conduct your measurements, avoiding any abnormalities. The first measurement should be about in the middle of the curve.

3. Measurement of Middle Ordinate – Determine the middle ordinate measurement through the following steps:
   a. Place nails in the pavement on the outside edge of the edgeline stripping 50' apart (at points 1 and 2 in the figure). One nail can be used to hold the hook at the end of the 50' measuring tape and the second nail can be used to pull the tape against or around (if cloth tape is used). The tape must be pulled taught and remain straight for step 3b.
   b. Measure the middle ordinate distance at the middle point of the tape (25'), using the smaller tape measure (at point 3 in the figure). The distance M should be read and recorded to the nearest 1/8".
   c. Repeat this measurement by moving points 1 and 2 together about 10 feet left and then 10 feet right of the first measurement. This provides three measurements.

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